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FEDERAL AVIATION  
ADMINISTRATION

Issues Concerning the  
Reauthorization of Aviation  
Programs

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Mr. Chairman and Members of the Committee:

We are pleased to be here to provide information for your deliberations on reauthorizing programs for the Federal Aviation Administration (FAA), including the Airport Improvement Program (AIP). Last year, the Senate passed legislation to reauthorize FAA's programs for a 2-year period. The Senate legislation included various provisions to enhance competition and service in the aviation industry and to improve aviation safety, security, and system capacity. However, the House did not pass similar legislation, and instead, the Congress passed a 6-month reauthorization that expires on March 31, 1999. You asked us to comment on issues considered in the proposed legislation that you introduced yesterday.

Over the years, we have performed a significant body of work in several areas covered in the proposed legislation—aviation competition, FAA's air traffic control modernization program, FAA's efforts to make its computer systems ready for the year 2000, AIP funding, and aviation safety and security. Today, we will provide you with our views on these issues, which you may wish to consider in drafting new reauthorization legislation. In summary:

- Provisions in the draft legislation to enhance the competitiveness of the aviation industry address concerns we have raised about operating barriers at airports and airline marketing practices that have limited the full potential benefits of deregulation. Airline deregulation has led to lower airfares and better service for most air travelers, largely because of increased competition spurred by the entry of new airlines into the industry and established carriers into new markets. However, some communities have not shared these benefits and have experienced higher air fares and/or less convenient service since deregulation. By establishing programs to promote air service in various communities, the draft legislation would assist communities in developing and improving their air service. The draft legislation would also address various barriers—including certain marketing practices, restrictive gate leases, and limits on the number of take-offs and landings at four congested airports—that have contributed to limiting the full potential benefits of deregulation.
- The reporting requirements that the proposed legislation would place on FAA's air traffic control modernization program would aid in continued congressional oversight of this problem-ridden program. Over the past 17 years, FAA's multibillion-dollar program to modernize aging air traffic control systems has experienced cost overruns, schedule slippages, and

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performance problems of large proportions. Because of the program's size, complexity, cost, and problems, we have designated it as a high-risk information technology initiative since 1995. Our recent review of the program indicated continuing problems. For example, the Wide Area Augmentation System has incurred significant cost growth and schedule delays, and questions remain about whether the system can perform as originally intended.

- The proposed legislation calls for FAA to report every 3 months on the problems associated with making its computer systems ready for the year 2000. The implications of FAA's not meeting the Year 2000 deadline are enormous and could affect hundreds of thousands of people through customers' inconvenience, increased airline costs, grounded or delayed flights, or degraded levels of safety. Over the last year, we have reported that FAA continues to face serious challenges in meeting the deadline. Our recent review of FAA's efforts indicated a need for continued attention to the agency's progress, as called for in the proposed legislation. Focusing solely on FAA, however, provides an incomplete picture of the nationwide network of aviation operations. Airports and domestic airlines also depend on computer technologies and are likely to be affected by the Year 2000 problem. We found that many airports did not believe they would meet FAA's recommended deadline for completing preparations for the Year 2000. It would be appropriate to expand the reauthorization language to require FAA to also report on the Year 2000 status of airports and airlines.
- Provisions to reauthorize AIP would help to address critical funding shortfalls for airport development by expanding FAA's innovative pilot projects and providing small airports with more flexibility in funding AIP projects, among other things. In addition, the proposed legislation would help to improve FAA's information on airfield pavement quality, which should improve decisions about funding these costly improvements.
- The legislation's proposals to enhance aviation safety and security encompass areas in which we have identified a continuing need for improvements. Requiring FAA to promptly address issues that could prevent future accidents and better deal with human error are positive steps. Similarly, requiring FAA to report on the status of its new airline inspection and certification program and providing additional oversight of aircraft repair stations should result in additional safety improvements.

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## Enhancing Aviation Competition

Airline deregulation has led to lower fares and better service for most air travelers, largely because of increased competition spurred by the entry of new airlines into the industry and established carriers into new markets. However, some communities have not experienced the benefits

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of deregulation and thus have found themselves facing higher air fares and/or less convenient service. In numerous reports and testimonies issued since the late 1980s, we have found that competition could be improved in many communities around the country. Various operating barriers—including restrictive gate leases and limits on the number of take-offs and landings at four congested airports—and airline marketing practices have contributed to limiting the full potential benefits of deregulation. The proposed legislation addresses a number of important issues intended to enhance the overall competitiveness of the aviation industry.

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## Community Aviation Programs

Among other things, the proposed bill would establish two programs to promote air service in various communities and establish ways to overcome some of the operating barriers that we identified. The proposal would authorize the expenditure of up to \$30 million for a 4-year program to develop air service in up to 40 small communities, or groups of communities. A second pilot program would assist communities and states with inadequate access to the national transportation system in improving their access to the system.

The programs would provide a vehicle for trying and evaluating different approaches to improving air service. We found that a variety of factors have contributed to the higher fares and poorer service that some communities have experienced since deregulation.<sup>1</sup> Similarly, we suggested that a coordinated effort involving federal, regional, state, local, and private-sector initiatives may be needed to address those factors. Such initiatives, coupled with other initiatives included in this legislation—particularly provisions relating to the use of regional jets by commuter carriers—have the potential for increasing competition and improving the quality of service for some communities. We believe the programs may provide the vehicle by which such efforts can be systematically tested and evaluated.

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## Airline Practices

The proposed legislation would require the Department of Transportation (DOT) to review the practices of airlines that may inhibit the availability of quality, affordable air transportation services to small and medium-sized communities and to take appropriate regulatory actions to address

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<sup>1</sup>See, for example, Domestic Aviation: Barriers Continue to Limit Competition (GAO/T-RCED-98-32, Oct. 28, 1997).

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problems. These practices include marketing, code-sharing partnerships, and gate leases at airports.<sup>2</sup>

We have long recognized that the marketing practices of major airlines—such as frequent flyer programs and travel agent commission overrides—may make competitive entry more difficult for other airlines.<sup>3</sup> These practices encourage travelers to choose one airline over another on the basis of factors other than obtaining the best fare. Such practices may be especially important if an airline is already dominant in a given market or markets. Ultimately, these practices may lead to higher fares than would exist in their absence. Other marketing arrangements, such as code-sharing partnerships between airlines, may have both positive and negative effects on consumers.<sup>4</sup> For example, the partnerships may improve the convenience of connections for travelers but could reduce competition and lead to higher fares if alliance partners do not compete with each other.

Restrictive gate leases may also be barriers to establishing new or expanded service at some airports. We reported that gate leases at six key airports permitted one or a few airlines to hold exclusive rights to use most of an airport's gates over a long period of time, commonly 20 years. Such leases have prevented nonincumbents from securing necessary airport facilities on equal terms with incumbent airlines and have contributed to higher airfares at these airports.<sup>5</sup> We are analyzing information on recent changes in airfares and gate arrangements and plan on reporting that information to you in February 1999.

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## Slot Exemptions and Perimeter Rule

The legislation also requires DOT to quickly grant or deny exemptions for nonstop regional jet service from small communities into three high-density airports—O'Hare, LaGuardia, and Kennedy. To reduce congestion, FAA has limited since 1969 the number of takeoffs and landings

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<sup>2</sup>Code-sharing occurs when an airline, by agreement, uses its designator code to market flights operated by another carrier as its own.

<sup>3</sup>Under frequent flier programs, passengers qualify for awards by flying a certain number of miles with the sponsoring airline. A travel agent commission override is a special bonus commission paid by airlines to travel agents or agencies as a reward for booking a targeted proportion of passengers on their airline. Among our reports, see *Aviation Competition: International Aviation Alliances and the Influence of Airline Marketing Practices* (GAO/T-RCED-98-131, Mar. 19, 1998).

<sup>4</sup>*Aviation Competition: Proposed Domestic Airline Alliances Raise Serious Issues* (GAO/T-RCED-98-215, June 4, 1998).

<sup>5</sup>This issue is discussed, for example, in *Airline Competition: Effects of Airline Market Concentration and Barriers to Entry on Airfares* (GAO/RCED-91-101, Apr. 15, 1991).

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(referred to as slots) that can occur at these airports and at Ronald Reagan Washington National Airport. However, efforts by DOT to allocate these slots equitably among airlines have not been effective in preventing established airlines from strengthening their control of slots. In response to our October 1996 report, DOT began to use the authority that the Congress gave it in 1994 to allow additional slots at O'Hare, LaGuardia, and Kennedy.<sup>6</sup> These exemptions could help to enhance service from some small and medium-sized communities.

The draft legislation would also provide limited exemptions to the federal perimeter rule at Reagan National that prohibits incoming and outgoing flights exceeding 1,250 miles. Among other things, the draft legislation would require DOT to assess the impact of the exemptions on safety, noise levels, and the environment. The perimeter rule, which has been amended in the past to extend the distance, has been used to promote Dulles Airport as the long-haul airport for the metropolitan area. However, the rule restricts the ability of airlines based in the West to serve Reagan National because they are not allowed to fly directly from the markets where they are strongest. By contrast, because of their proximity to Reagan National, each of the seven largest established carriers is able to serve the airport from its principal hub.<sup>7</sup>

In 1996, we suggested that the Congress consider granting DOT the authority to allow exemptions to the perimeter rule at Reagan National when the proposed service will substantially increase competition.<sup>8</sup> We did not recommend that the rule be abolished because doing so could have unintended negative consequences, such as reducing the amount of service to smaller communities in the Northeast and Southeast. This could happen if the airlines serving Reagan National were to shift their service from those communities to take advantage of more profitable, longer-distance routes.

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<sup>6</sup>The FAA Authorization Act of 1994 (P.L. 103-305, section 206) created an exemption provision to allow additional slots at O'Hare, LaGuardia, and Kennedy when DOT "finds it to be in the public interest and the circumstances to be exceptional." The number of flights at Reagan National is further limited by federal law to address local concerns about noise. DOT's exemption authority does not presently include Reagan National. Airline Deregulation: Barriers to Entry Continue to Limit Competition in Several Key Domestic Markets (GAO/RCED-97-4, Oct. 18, 1996).

<sup>7</sup>A similar rule is in place at New York's LaGuardia airport, restricting flights to within 1,500 miles. It was established by the Port Authority of New York & New Jersey and was intended to promote Kennedy as the long-haul airport for the metropolitan area.

<sup>8</sup>Airline Deregulation: Barriers to Entry Continue to Limit Competition in Several Key Domestic Markets (GAO/RCED-97-4, Oct. 18, 1996).

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The proposed legislation would also delineate special rules for O'Hare by granting 30 slot exemptions over a 3-year period—18 for underserved markets and 12 for air carrier slot exemptions. DOT would be required to report to the Congress 3 years after the first exemption is granted on the impact of the additional slots on safety, environment, noise, access to underserved markets, and competition. In the year 2000, DOT would be required to complete another study encompassing all four high-density airports.<sup>9</sup>

We recognize that the communities where the airports are located will be concerned with any proposals to grant additional slots because of potential congestion, noise, and safety problems. These are sensitive issues, and ultimately, any final decisions about slots can best be resolved through congressional deliberations. However, the proposed legislation provides for a relatively modest number of additional slots and could enhance competition at and improve access to these airports. Similarly, the proposed requirements that would spread the additional flights at Reagan National throughout the day and limit those flights to quieter, stage 3 aircraft, may mitigate the concerns of the community. And finally, by requiring DOT to report to the Congress on the impacts of the additional slots at Reagan National, the draft bill would provide an opportunity to reexamine concerns about noise, safety, and the environment.

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## Overseeing Air Traffic Control Modernization

Over the past 17 years, FAA's multibillion-dollar program to modernize aging air traffic control systems has experienced cost overruns, schedule slippages, and performance problems of large proportions. Because of the program's size, complexity, cost, and problems, we have designated it as a high-risk information technology initiative since 1995. The proposed legislation contains reporting requirements for several of the program's major modernization projects. We recently reported on the status of major projects and would like to provide you with an update on the progress and challenges faced by two of the projects targeted in the draft legislation—the Wide Area Augmentation System (WAAS) and Oceanic Automation System.<sup>10</sup>

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## Wide Area Augmentation System

The proposed legislation would call for FAA to report to the Senate and House authorizing committees on the implementation plans and the

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<sup>9</sup>The report due in 2000, when the airports are using only stage 3 aircraft, would compare current community noise levels with the 1991 levels.

<sup>10</sup>Air Traffic Control: Status of FAA's Modernization Program (GAO/RCED-99-25, Dec. 3, 1998).

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timetable for the WAAS system—a network of ground stations and geostationary communications satellites. FAA would also be required to determine whether WAAS will ultimately be the primary or sole means of navigation. FAA is developing the system to augment the Global Positioning System (GPS)<sup>11</sup> to enable it to replace its present ground-based navigation system with a satellite-based system. WAAS has incurred significant cost growth—from approximately \$500 million in 1994 to just over \$1 billion in 1998 to develop the system and from about \$1.5 billion in 1997 to slightly over \$2.0 billion in 1998 to operate and maintain it. FAA recently reported that the operation of the initial system—originally planned for June 1997—was likely to be delayed until September 2000. FAA attributed the delay to problems with the development of a critical software component that helps ensure that WAAS signals are precise and valid. We have reported over the years that the lack of a disciplined software acquisition process has contributed to FAA's past problems to deliver systems capabilities on time and within budget.<sup>12</sup>

Furthermore, many questions remain about whether WAAS can perform as originally intended—that is, provide the sole means of navigation, so that it allows aircraft to meet all performance requirements for the navigation system for a given operation or phase of flight. With WAAS fully operational, FAA would be able to phase out its costly network of ground-based navigation aids. Key issues that relate to the system's ultimate capability include (1) its cost/benefit, (2) the vulnerability of GPS signals to radio frequency interference, (3) the availability of a second civil broadcast frequency, and (4) the acquisition of additional satellites. FAA is currently addressing these issues, and their resolution will allow the agency to develop a roadmap for the future navigation system. The reporting requirements outlined in the draft legislation regarding the certification of WAAS' capabilities and the necessity of a back-up system until FAA determines that WAAS should be the sole means of navigation would aid in continued congressional oversight to help ensure that FAA does not repeat past problems with major modernization systems.

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## Oceanic Air Traffic Control System

The proposed legislation also calls for FAA to report to the Congress on plans to modernize the oceanic air traffic control system and, if necessary, submit a proposal to fund the project. FAA's oceanic automation project is

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<sup>11</sup>The Department of Defense's GPS satellites transmit radio signals that allow properly equipped air, land, and sea users to calculate the time and their position and speed anywhere above the earth's surface and under any condition.

<sup>12</sup>Air Traffic Control: Immature Software Acquisition Processes Increase FAA System Acquisition Risks (GAO/AIMD-97-47, Mar. 21, 1997).

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designed to improve air traffic control over the ocean by allowing controllers and aircraft operators to take advantage of new technology and procedures—such as automatic dependent surveillance position reporting, advanced conflict probe, and data link—that would improve safety and traffic flow.<sup>13</sup>

The oceanic project has encountered problems in development. For example, the project's scope has been reduced from five segments, which would have allowed incremental functional improvements, to one segment. That one segment, in turn, has been reduced from three to two components—data link and controller tools. FAA eliminated the third component—a requirement for automatic dependent surveillance—from this segment, partially in response to contractor performance problems and the potential for a \$45 million cost increase to this segment. FAA reported that it was on schedule to deliver the data link and controller tools by October 1999.

FAA officials believe that further improvements in oceanic air traffic control automation are needed and are examining alternative means to satisfy those needs. Oceanic users expect FAA to improve oceanic air traffic control to allow them to achieve maximum fuel efficiency, minimum travel time, and access to preferred takeoff times and flight paths. The draft legislation's reporting requirement, including a budget for the program, is important to help ensure that FAA meets these expectations.

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## Managing the Year 2000 Problem

The proposed legislation calls for FAA to report to the House and Senate authorizing committees every 3 months on problems associated with making its computer systems ready for the year 2000. To safely guide and direct aircraft, FAA depends on an extensive array of information-processing and communications technologies. The implications of FAA's not meeting the Year 2000 deadline are enormous and could affect hundreds of thousands of people through customers' inconvenience, increased airline costs, grounded or delayed flights, or degraded levels of safety. Over the last year, we have reported that FAA continues to face serious challenges in meeting the deadline. In

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<sup>13</sup>Automatic dependent surveillance is a technology that will provide more accurate position reports for use by controllers and pilots to safely reduce distances between aircraft and make more efficient use of airspace. Conflict probe tools allow air traffic controllers to identify conflicts up to 20 minutes in advance of their occurrence. Advanced tools would provide controllers with suggested resolution for these conflicts. Data link provides digital communication between ground and airborne automation systems. All of these capabilities will ultimately allow FAA to move to a more collaborative system of air traffic management known as "free flight."

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August 1998, we reported that FAA was unlikely to complete critical testing activities in time because, among other reasons, its projections were based on very optimistic schedules and because the agency's testing process is complex. We also reported that unresolved risks—including those associated with data exchanges, international coordination, reliance on the telecommunications infrastructure, and business continuity and contingency planning—threatened aviation operations.

More recently, our reviews of DOT's Year 2000 progress reports demonstrate the need for continued attention to FAA's progress. DOT recently reported that FAA expected to complete implementing<sup>14</sup> repairs on 33 of its 155 mission-critical systems by December 31, 1998. However, it later reported that only 14 of these systems were completed by that date. While there could be a reasonable explanation for FAA's not reaching its goals, this type of information would be valuable to congressional committees to allow further questioning and to aid in congressional decision-making. This type of information is called for in the draft legislation.

Focusing solely on FAA, however, provides an incomplete picture of the nationwide network of aviation operations, commonly called the National Airspace System (NAS). In addition to FAA's air traffic control system, major NAS components include airports and domestic airlines, which both depend on computer technologies and are likely to be affected by the Year 2000 problem. FAA has some insight into the Year 2000 status of these industries because it regulates certain airline and airport systems. The agency has also hosted a number of outreach meetings aimed at sharing Year 2000 information with members of the aviation community.

At the request of this Committee and its Subcommittee on Aviation, we are reviewing the status of airports' preparations for the Year 2000 and will issue a report soon. We have found that nearly a third of the more than 330 airports that responded to our survey did not report that they would meet the June 1999 date recommended by FAA to complete preparations for the Year 2000 and did not have contingency plans for Year 2000 induced failures. Therefore, it would be appropriate to expand the reauthorization language to require FAA to report on the Year 2000 status of all critical NAS components—including airports and airlines.

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<sup>14</sup>Implementation is the final phase in the government's approach to resolving Year 2000 problems. It occurs after systems have been fixed and tested and involves putting systems into operation.

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## Funding Airport Improvement Programs

AIP provides grants to fund the capital needs of the nation's commercial and general aviation airports. Funding for most of FAA and all of AIP is provided through the Airport and Airway Trust Fund. The proposed legislation would remove caps on the amount of discretionary grants, increase the apportionment for noise grants, and make other technical adjustments to the AIP funding formula.

We have previously reported on the need for adequate and predictable funding for airport improvements. Last year, we reported that airports face a potential funding gap of as much as \$3 billion annually over the 5-year period, 1997-2001.<sup>15</sup> The \$3 billion is the difference between \$10 billion in planned development and \$7 billion in funding at historical levels. The difference between current funding and planned development is especially acute for smaller airports. Their 1996 funding covered only about half of their total planned development.

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## Innovative Financing

To help address airports' funding needs, the proposed legislation would codify FAA's innovative finance pilot project and expand it from 10 to 20 projects.<sup>16</sup> The pilot project allows FAA to provide AIP grants to projects that demonstrate innovative financing, specifically through the payment of interest, credit enhancement, and a flexible nonfederal matching share. The draft bill would also provide small airports with more flexibility in funding AIP projects by allowing them to contribute more than 10 percent in local matching funds.

In March 1998, we reported that FAA's innovative financing pilot program had attracted only limited interest among airports.<sup>17</sup> Of the airports that applied, the greatest interest was for flexible local matching, which allows local airport sponsors to increase their local matching contribution above 10 percent. Flexible matching allows projects, which otherwise may be delayed, to be started sooner and may ultimately increase the funds available for the airports' infrastructure needs. We also recommended that the Secretary of Transportation be given the authority to use AIP grants to capitalize state revolving funds for those states with the capability of managing such a fund. We believe that state revolving funds are an

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<sup>15</sup>Airport Financing: Comparing Funding Sources With Planned Development (GAO/T-RCED-98-129, Mar. 19, 1998).

<sup>16</sup>FAA selected 10 projects before the pilot expired at the end of fiscal year 1998.

<sup>17</sup>Airport Financing: Funding Sources for Airport Development (GAO/RCED-98-71, Mar. 12, 1998).

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innovative financing concept that could help smaller airports obtain additional financing.

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## Airfield Pavement

The proposed legislation would also require FAA to evaluate options for improving the quality of information on runway pavement condition. Runways, like highways, are prone to deterioration from weather and usage. Left unchecked, such deterioration can eventually pose safety risks to planes. While the rehabilitation of runway pavement is a high priority for FAA in awarding AIP grants, the agency does not have accurate, consistent, nationwide information on the runways' condition. To improve the existing information contained in the Airport Safety Data Program, we recommended that FAA require airports to submit these data on a regular basis in order to create a pavement condition database.<sup>18</sup> The draft bill incorporates our recommendations.

We also reported in July 1998 that while most runway pavement is currently in good condition, over the next 10 years, many airports will face substantial costs to keep them in that condition. We estimated that future costs to maintain airport runways will be \$1.38 billion if rehabilitation occurs when needed. However, this could mean as much as \$774 million in the first year alone. If, however, runaway rehabilitation is funded at the historical level of about \$162 annually, the overall cost of maintaining runways will increase and will result in an unmet need of \$2.37 billion after 10 years. This situation will occur because many projects would be deferred, pavement would deteriorate more rapidly, and pavement would ultimately become more expensive to rehabilitate.

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## Improving Aviation Safety and Security

The proposed legislation contains a number of provisions to enhance the safety and security of the nation's aviation system. We have done work that is relevant to provisions concerning Flight Operational Quality Assurance (FOQA) programs, human factors issues, the Air Transport Oversight System (ATOS), and the oversight of aircraft repair stations.

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## Flight Operational Quality Assurance Programs

The proposed legislation would require FAA to promptly issue a Notice of Proposed Rulemaking to protect air carriers and their employees from civil enforcement penalties for incidents discovered under FOQA programs. These programs analyze data recorded during uneventful flights to detect

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<sup>18</sup>The pavement condition index rates pavements on a scale of 100 (excellent) to 0 (failed). See *Airfield Pavement: Keeping Nation's Runways in Good Condition Could Require Substantially Higher Spending* (GAO/RCED-98-226, July 31, 1998).

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technical flaws and unsafe practices or conditions early enough to prevent future accidents or incidents. In December 1997, we reported on the important safety benefits that could result from such programs.<sup>19</sup> In that report, we identified as a serious impediment to implementing FOQA programs the concerns held by airlines and pilots that the information gathered would be used against them in civil enforcement actions by FAA. We believe that it is time for this concern to be laid to rest and that formal rulemaking is the appropriate way to do so. Last month, FAA issued a policy statement promising conditional protection from civil enforcement actions for airlines participating in FOQA programs. The agency has also indicated that a Notice of Proposed Rulemaking will soon be forthcoming. The statement reiterated a policy statement issued in February 1995, but no rule has been issued.

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## Human Factors

In addition, the proposed legislation would emphasize the importance of ensuring that human factors concerns are addressed throughout FAA. Human factors is a science that examines how humans interact with machines and other people and determines whether procedures and regulations take into account human abilities and limitations. Identifying chances for human error can reduce the need for later replacing or modifying equipment and procedures. Among other things, the draft legislation would require FAA to address problems and concerns that have been raised about its human factors program and to develop human factors training for pilots and flight crews.

In 1997, we recommended that FAA better integrate human factors considerations into the projects it was developing.<sup>20</sup> In addition, we and others have pointed out several cases in which increased and early attention by FAA to human factors issues could enhance the agency's efficiency and effectiveness. The National Air Traffic Controllers Association and the Professional Airways Systems Specialists are working with FAA to resolve numerous human factors problems with the Standard Terminal Automation Replacement System (STARS)—a major component of the air traffic control modernization program, which will replace aging controller workstations and supporting equipment. The fact that many of the human factors issues were not identified and resolved early in the project has contributed to added project cost and schedule delays. FAA

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<sup>19</sup>See *Aviation Safety: Efforts to Implement Flight Operational Quality Assurance Programs*, (GAO/RCED-98-10, Dec. 2, 1997).

<sup>20</sup>See *Human Factors: Status of Efforts to Integrate Research on Human Factors Into FAA's Activities* (GAO/RCED-96-151, June 27, 1996).

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estimated that the total cost for incorporating all human factor issues into the final design of STARS would be \$192 million and entail a delay of more than 2 years.

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## Air Transport Oversight System

The draft legislation would also establish reporting requirements for FAA on ATOS—a reengineered approach to the way FAA fulfills its safety inspection and certification responsibilities, which are essential to the safe operation of the nation's aviation system. Over the past several years, we and others have reported on a number of deficiencies in FAA's inspection program.<sup>21</sup> ATOS was developed in part to respond to the criticisms and recommendations made by us and others. ATOS promises to provide a structured approach to inspections by using data on past accidents, incidents, and problems detected during inspections to target the surveillance of airlines. FAA began implementing the system in October 1998, applying it to the nation's 10 largest airlines. We are monitoring the system's implementation and plan to report our findings later this year.

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## Aircraft Repair Stations

The draft legislation would create an advisory panel to review issues related to the use and oversight of aircraft repair stations. During this decade, the airlines and air cargo industries have increasingly come to rely on independent repair stations to perform their maintenance. FAA is responsible for certifying these repair stations and inspecting them regularly to ensure that they continue to meet the agency's certification requirements. In October 1997, we found that FAA was meeting its goal of inspecting every repair station at least once a year.<sup>22</sup> The overwhelming majority of the inspectors we surveyed stated that they believed the overall compliance of repair stations was good or excellent. However, more than half of the inspectors believed there were areas of compliance that repair stations could improve. We made a number of recommendations to improve the quality of inspections and record keeping, and DOT is now implementing our recommendations. The proposed legislation would provide continued oversight of repair stations.

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<sup>21</sup>See, for example, *Aviation Safety: Weaknesses in Inspection and Enforcement Limit FAA in Identifying and Responding to Risks* (RCED-98-6, Feb. 27, 1998); *Aviation Safety: New Airlines Illustrate Long-Standing Problems in FAA's Inspection Program* (GAO/RCED-97-2, Oct. 17, 1996).

<sup>22</sup>See *Aviation Safety: FAA Oversight of Repair Stations Needs Improvement* (GAO/RCED-98-21, Oct. 24, 1997).

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In summary, we have conducted a large body of work that addresses many of the issues now being considered by this Committee. We support the passage of legislation to reauthorize FAA. It provides an opportunity to address critical issues facing FAA and the aviation community while ensuring appropriate Congressional oversight. We would be glad to work with you and your staff through this legislative process.

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Mr. Chairman and Members of the Committee, this concludes our prepared statement. We would be glad to respond to questions.

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